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The Delphion Integrated View: INPADOC Record

Title: **IL0133264A0: POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN TRANSDUCED CELLS**

Derwent Title: New human polynucleotide useful for treating angiogenesis, restenosis, and inflammation [Derwent Record]

High Resolution

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1998-07-02 **US1998000109386**
1998-08-31 **WO1998US0017954**

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Designated Country: AL AM AP AZ BA BB BG BR BY CA CU CZ EA EE GE GH GM HR ID IL IS KE KG AT BE CH DE DK ES FI FR GB GR IE IT

Family:

PDF	Publication	Pub. Date	Filed	Title
	WO9957244A1	1999-11-11	1999-04-29	GENETICALLY MODIFIED CELLS AND METHODS FOR EXPRESSING RECOMBINANT HEPARANASE AND METHODS OF PURIFYING SAME
	WO9957153A1	1999-11-11	1999-04-29	HEPARANASE SPECIFIC MOLECULAR PROBES AND THEIR USE IN RESEARCH AND MEDICAL APPLICATIONS
	WO9948478A1	1999-09-30	1999-03-22	USE OF GLYCOSAMINOGLYCANS DEGRADING ENZYMES FOR MANAGEMENT OF AIRWAY ASSOCIATED DISEASES
	WO9911798A1	1999-03-11	1998-08-31	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN TRANSDUCED CELLS
	WO0235350C2	2003-02-20	2001-10-15	INCREMENTAL CLUSTERING CLASSIFIER AND PREDICTOR
				INCREMENTAL CLUSTERING CLASSIFIER

	WO0235350A1	2002-05-02	2001-10-15	AND PREDICTOR
	WO0219962A3	2002-07-11	2001-09-05	THERAPEUTIC AND COSMETIC USES OF HEPARANASES
	WO0219962A2	2002-03-14	2001-09-05	THERAPEUTIC AND COSMETIC USES OF HEPARANASES
	WO0052178A1	2000-09-08	2000-02-14	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN GENETICALLY MODIFIED CELLS
	WO0052149A1	2000-09-08	2000-02-10	INTRODUCING A BIOLOGICAL MATERIAL INTO A PATIENT
	WO0025817A1	2000-05-11	1999-10-28	HEPARANASE ACTIVITY NEUTRALIZING ANTI-HEPARANASE MONOCLONAL ANTIBODY
	WO0003036A1	2000-01-20	1999-07-12	METHOD OF SCREENING FOR POTENTIAL ANTI-METASTATIC AND ANTI-INFLAMMATORY AGENTS USING MAMMALIAN HEPARANASE AS A PROBE
	US20060008892A1	2006-01-12	2005-06-17	Methods of and pharmaceutical compositions for improving implantation of embryos
	US20050260187A1	2005-11-24	2005-04-15	Therapeutic and cosmetic uses of heparanases
	US20040229834A1	2004-11-18	2004-05-24	Heparanase specific molecular probes and their use in research and medical applications
	US20040213789A1	2004-10-28	2003-08-22	Heparanase activity neutralizing anti-heparanase monoclonal antibody and other anti-heparanase antibodies
	US20040175371A1	2004-09-09	2004-03-15	Introducing a biological material into a patient
	US20040170631A1	2004-09-02	2003-11-28	Heparanase activity neutralizing anti-heparanase monoclonal antibody and other anti-heparanase antibodies
	US20040146925A1	2004-07-29	2004-02-26	Heparanase specific molecular probes and their use in research and medical applications
	US20040146497A1	2004-07-29	2004-02-20	Therapeutic and cosmetic uses of heparanases
	US20040142427A1	2004-07-22	2004-02-25	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in genetically modified cells
	US20040063135A1	2004-04-01	2003-10-02	Heparanase specific molecular probes and their use in research and medical applications
	US20030236215A1	2003-12-25	2003-06-09	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in genetically modified cells
	US20030217375A1	2003-11-20	2003-02-24	Transgenic animals expressing heparanase and uses thereof
	US20030190737A1	2003-10-09	2003-03-10	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in genetically modified cells
	US20030181687A1	2003-09-25	2003-02-19	Heparanase activity neutralizing anti-heparanase monoclonal antibody
	US20030170860A1	2003-09-11	2003-03-10	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in genetically modified cells
	US20030161823A1	2003-08-28	2003-01-14	Therapeutic and cosmetic uses of heparanases
	US20030068806A1	2003-04-10	2002-05-03	Genetically modified cells and methods for expressing recombinant heparanase and methods of purifying same
	US20030031660A1	2003-02-13	2002-06-07	Method of inducing bone formation
				Polynucleotide encoding a polypeptide having

	US20020168749A1	2002-11-14	2001-11-19	heparanase activity and expression of same in genetically modified cells
	US20020114801A1	2002-08-22	1999-06-01	HEPARANASE SPECIFIC MOLECULAR PROBES AND THEIR USE IN RESEARCH AND MEDICAL APPLICATIONS
	US20020102619A1	2002-08-01	2001-09-04	Heparanase specific molecular probes and their use in research and medical applications
	US20020102560A1	2002-08-01	2001-02-06	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in genetically modified cells
	US20020088019A1	2002-07-04	2001-10-17	Methods of and pharmaceutical compositions for improving implantation of embryos
	US20020068061A1	2002-06-06	1998-11-04	HEPARANASE ACTIVITY NEUTRALIZING ANTI-HEPARANASE MONOCLONAL ANTIBODY
	US20020068054A1	2002-06-06	2000-12-04	Therapeutic and cosmetic uses of heparanases
	US20020064858A1	2002-05-30	1998-08-27	COMPOSITIONS INCLUDING GLYCOSAMINOGLYCANS DEGRADING ENZYMES AND USE OF SAME AGAINST SURFACE PROTECTED BACTERIA
	US20020059202A1	2002-05-16	2001-05-14	Incremental clustering classifier and predictor
	US20020004585A1	2002-01-10	2001-01-16	Heparanase specific molecular probes and their use in research and medical applications
	US20010006630A1	2001-07-05	1999-03-02	INTRODUCING A BIOLOGICAL MATERIAL INTO A PATIENT
	US7049407	2006-05-23	2001-01-16	Heparanase specific antibodies and their use in research and medical applications
	US6986996	2006-01-17	2004-02-26	Heparanase specific molecular probes and their use in research and medical applications
	US6960471	2005-11-01	2003-03-10	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in genetically modified cells
	US6946131	2005-09-20	2003-02-19	Heparanase activity neutralizing anti-heparanase monoclonal antibody
	US6800441	2004-10-05	2001-09-04	Heparanase specific molecular probes and their use in research and medical applications
	US6790658	2004-09-14	2001-11-19	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in genetically modified cells
	US6699672	2004-03-02	2000-11-03	Heparanase specific molecular probes and their use research and medical applications
	US6664105	2003-12-16	1999-11-08	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in genetically modified cells
	US6562950	2003-05-13	1998-11-04	Heparanase activity neutralizing anti-heparanase monoclonal antibody
	US6531129	2003-03-11	1999-06-01	Heparanase specific molecular probes and their use in research and medical applications
	US6475763	2002-11-05	2000-01-19	Genetically modified cells and methods for expressing recombinant heparanase and methods of purifying same
	US6426209	2002-07-30	2000-08-10	Genetically modified cells and methods for expressing recombinant heparanase and methods of purifying same
	US6423312	2002-07-23	1998-08-27	Compositions including glycosaminoglycans degrading enzymes and use of same against surface protected bacteria
				Genetically modified cells and methods for

	US6348344	2002-02-19	1999-03-02	expressing recombinant heparanase and methods of purifying same
	US6190875	2001-02-20	1998-07-10	Method of screening for potential anti-metastatic and anti-inflammatory agents using mammalian heparanase as a probe
	US6177545	2001-01-23	1998-05-01	Heparanase specific molecular probes and their use in research and medical applications
	US6153187	2000-11-28	1998-03-25	Use of glycosaminoglycans degrading enzymes for management of airway associated diseases
	US5968822	1999-10-19	1997-09-02	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in transduced cells
	TR0000578T2	2000-07-21	1998-08-31	Heparanas aktiviteye sahip olan bir polipeptit desifre eden polin kleotit ve nevrilmis h crelerde aynisini izahi.
	PL0338949A1	2000-12-04	1998-08-31	POLYNUCLEOTIDE CODING A POLYPEPTIDE INDICATIVE OF HEPARANASE ACTIVITY AND ITS EXPRESSION IN CELLS SUBJECT TO TRANSDUCTION
	NO20014218A0	2001-08-31	2001-08-31	INTRODUKSJON AV BIOLOGISK MATERIALE INN I EN PASIENT
	NO20014218A	2001-10-26	2001-08-31	INTRODUKSJON AV BIOLOGISK MATERIALE INN I EN PASIENT
	NO20012190A0	2001-05-03	2001-05-03	Heparanase aktivitetsneytraliserende anti-heparanase monoklonalt antistoff
	NO20012190A	2001-06-12	2001-05-03	Heparanase aktivitetsneytraliserende anti-heparanase monoklonalt antistoff
	NO20010136A0	2001-01-09	2001-01-09	Fremgangsm te for screeining av potensielle anti-metastase og anti-inflammatoriske midler ved bruk av pattedyr heparanse som en probe
	NO20010136A	2001-03-09	2001-01-09	Fremgangsmte for screening av potensielle antimetastase og antiinflammatoriske midler ved anvendelse av pattedyr heparanase som en probe
	NO20005100A0	2000-10-10	2000-10-10	GENETISK MODIFISERTE CELLER OG FREMGANGSMTER FOR EKSPRESJON AV REKOMBINANT HEPARANASE OG FREMGANGSMTER FOR RENSING AV SAMME
	NO20005100A	2000-12-28	2000-10-10	GENETISK MODIFISERTE CELLER OG FREMGANGSMAATER FOR EKSPRESJON AV REKOMBINANT HEPARANASE OG FREMGANGSMAATER FOR RENSING AV SAMME
	NO0996229A0	1999-12-15	1999-12-15	Heparanase spesifikke molekylaere prober og deres anvendelse i forskning og medisin
	NO0996229A	2000-02-24	1999-12-15	Heparanase spesifikke molekylrre prober og deres anvendelse i forskning og medisin
	NO0996228A0	1999-12-15	1999-12-15	Polynucleotid som koder et polypeptid med heparanase aktivitet samt ekspresjon derav i transduserte celler
	NO0996228A	2000-02-28	1999-12-15	Polynucleotid som koder et polypeptid med heparanaseaktivitet, og ekspresjon av samme i transduserte celler
	JP2002543759T2	2002-12-24	1999-10-28	
	JP2002538181A2	2002-11-12	2000-02-10	
	JP2002520029T2	2002-07-09	1999-07-12	
	JP2002513560T2	2002-05-14	1999-04-29	

JP2002512533T2	2002-04-23	1999-04-29	
JP2001514855T2	2001-09-18	1998-08-31	
IL0144932A0	2002-06-30	2000-02-10	INTRODUCING A BIOLOGICAL MATERIAL INTO A PATIENT
IL0142866A0	2002-03-10	1999-10-28	HEPARANASE ACTIVITY NEUTRALIZING ANTI-HEPARANASE MONOCLONAL ANTIBODY
IL0140298A0	2002-02-10	1999-07-12	METHOD OF SCREENING FOR POTENTIAL ANTI-METASTATIC AND ANTI-INFLAMMATORY AGENTS USING MAMMALIAN HEPARANASE AS A PROBE
IL0138943A0	2001-11-25	1999-04-29	GENETICALLY MODIFIED CELLS AND METHODS FOR EXPRESSING RECOMBINANT HEPARANASE AND METHODS OF PURIFYING SAME
IL0133265A0	2001-04-30	1999-04-29	HEPARANASE SPECIFIC MOLECULAR PROBES AND THEIR USE IN RESEARCH AND MEDICAL APPLICATIONS
IL0133264A0	2001-04-30	1998-08-31	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN TRANSDUCED CELLS
HU0002675AB	2000-12-28	1998-08-31	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN TRANSDUCED CELLS
ES2259816T3	2006-10-16	1998-08-31	CODIFICACION POLINUCLEOTIDA DE UN POLIPEPTIDO CON ACTIVIDAD HEPARANASA Y EXPRESION DEL MISMO EN CELULAS TRANSDUCIDAS.
EP1676912A2	2006-07-05	1998-08-31	Medical equipment containing a polypeptide having heparanase activity
EP1489183A1	2004-12-22	1998-08-31	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in transduced cells
EP1439226A3	2004-10-06	1998-08-31	A nucleic acid antisense sequence to a polynucleotide encoding a polypeptide having heparanese activity
EP1439226A2	2004-07-21	1998-08-31	A nucleic acid antisense sequence to a polynucleotide encoding a polypeptide having heparanese activity
EP1439193A3	2004-10-06	1998-08-31	Antibody directed to polypeptide having heparanase activity
EP1439193A2	2004-07-21	1998-08-31	Antibody directed to polypeptide having heparanase activity
EP1317271A2	2003-06-11	2001-09-05	THERAPEUTIC AND COSMETIC USES OF HEPARANASES
EP1159409A4	2003-05-02	2000-02-10	INTRODUCING A BIOLOGICAL MATERIAL INTO A PATIENT
EP1159409A1	2001-12-05	2000-02-10	INTRODUCING A BIOLOGICAL MATERIAL INTO A PATIENT
EP1157118A4	2002-07-17	2000-02-14	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN GENETICALLY MODIFIED CELLS
EP1157118A1	2001-11-28	2000-02-14	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN GENETICALLY MODIFIED CELLS

	EP1126878A4	2003-04-16	1999-10-28	HEPARANASE ACTIVITY NEUTRALIZING ANTI-HEPARANASE MONOCLONAL ANTIBODY
	EP1126878A1	2001-08-29	1999-10-28	HEPARANASE ACTIVITY NEUTRALIZING ANTI-HEPARANASE MONOCLONAL ANTIBODY
	EP1097241A1	2001-05-09	1999-07-12	METHOD OF SCREENING FOR POTENTIAL ANTI-METASTATIC AND ANTI-INFLAMMATORY AGENTS USING MAMMALIAN HEPARANASE AS A PROBE
	EP1076689A4	2003-04-02	1999-04-29	GENETICALLY MODIFIED CELLS AND METHODS FOR EXPRESSING RECOMBINANT HEPARANASE AND METHODS OF PURIFYING SAME
	EP1076689A1	2001-02-21	1999-04-29	GENETICALLY MODIFIED CELLS AND METHODS FOR EXPRESSING RECOMBINANT HEPARANASE AND METHODS OF PURIFYING SAME
	EP1073682A4	2001-02-07	1999-04-29	HEPARANASE SPECIFIC MOLECULAR PROBES AND THEIR USE IN RESEARCH AND MEDICAL APPLICATIONS
	EP1073682A1	2001-02-07	1999-04-29	HEPARANASE SPECIFIC MOLECULAR PROBES AND THEIR USE IN RESEARCH AND MEDICAL APPLICATIONS
	EP0998569B1	2006-03-01	1998-08-31	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN TRANSDUCED CELLS
	EP0998569A4	2000-08-16	1998-08-31	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN TRANSDUCED CELLS
	EP0998569A1	2000-05-10	1998-08-31	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN TRANSDUCED CELLS
☑	DE69833667T2	2007-03-08	1998-08-31	POLYNUKLEOTID, KODIEREND F R EIN POLYPEPTID MIT HEPARANASE-AKTIVIT T UND DESSEN EXPRESSION IN TRANSDUZIERTEN ZELLEN
	DE69833667C0	2006-04-27	1998-08-31	POLYNUKLEOTID KODIEREND F R EIN POLYPEPTID MIT HEPARANASE-AKTIVIT T UND DESSEN EXPRESSION IN TRANSDUZIERTEN ZELLEN
☑	CN1272886T	2000-11-08	1998-08-31	Polynucleotide encoding polypeptide having heparanase activity and expression of same in transduced cells
☑	CN1272886A	2000-11-08	1998-08-31	Polynucleotide encoding polypeptide having heparanase activity and expression of same in transduced cells
☑	CA2364463AA	2000-09-08	2000-02-10	INTRODUCING A BIOLOGICAL MATERIAL INTO A PATIENT
☑	CA2349622AA	2000-05-11	1999-10-28	HEPARANASE ACTIVITY NEUTRALIZING ANTI-HEPARANASE MONOCLONAL ANTIBODY
☑	CA2335382AA	2000-01-20	1999-07-12	METHOD OF SCREENING FOR POTENTIAL ANTI-METASTATIC AND ANTI-INFLAMMATORY AGENTS USING MAMMALIAN HEPARANASE AS A PROBE
				GENETICALLY MODIFIED CELLS AND

☑	CA2329142AA	1999-11-11	1999-04-29	METHODS FOR EXPRESSING RECOMBINANT HEPARANASE AND METHODS OF PURIFYING SAME
☑	CA2296758AA	1999-03-11	1998-08-31	POLYNUCLEOTIDE ENCODING A POLYPEPTIDE HAVING HEPARANASE ACTIVITY AND EXPRESSION OF SAME IN TRANSDUCED CELLS
☑	AU9125898A1	1999-03-22	1998-08-31	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in transduced cells
☑	AU4869799A1	2000-02-01	1999-07-12	METHOD OF SCREENING FOR POTENTIAL ANTI-METASTATIC AND ANTI-INFLAMMATORY AGENTS USING MAMMALIAN HEPARANASE AS PROBE
☑	AU3870699A1	1999-11-23	1999-04-29	Heparanase specific molecular probes and their use in research and medical applications
☑	AU3770599A1	1999-11-23	1999-04-29	GENETICALLY MODIFIED CELLS AND METHODS FOR EXPRESSING RECOMBINANT HEPARANASE ANDMETHODS OF PURIFYING SAME
☑	AU3107799A1	1999-10-18	1999-03-22	USE OF GLYCOSAMINOGLYCANS DEGRADING ENZYMES FOR MANAGEMENT OF AIRWAY ASSOCIATED DISEASES
☑	AU0761592B2	2003-06-05	2000-02-10	INTRODUCING A BIOLOGICAL MATERIAL INTO A PATIENT
☑	AU0758485B2	2003-03-20	1999-07-12	Method of screening for potential anti-metastatic and anti-inflammatory agents using mammalian heparanase as a probe
☑	AU0754228B2	2002-11-07	1999-04-29	Heparanase specific molecular probes and their use in research and medical applications
☑	AU0751170B2	2002-08-08	1999-10-28	Heparanase activity neutralizing anti-heparanase monoclonal antibody
☑	AU0735116B2	2001-06-28	1998-08-31	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in transduced cells
☑	AU0213188A5	2002-05-06	2001-10-15	Incremental clustering classifier and predictor
☑	AU0184380A5	2002-03-22	2001-09-05	Therapeutic and cosmetic uses of heparanases
☑	AU0029881A5	2000-09-21	2000-02-10	INTRODUCING A BIOLOGICAL MATERIAL INTO A PATIENT
☑	AU0028786A5	2000-09-21	2000-02-14	Polynucleotide encoding a polypeptide having heparanase activity and expression of same in genetically modified cells
☑	AU0013314A5	2000-05-22	1999-10-28	HEPARANASE ACTIVITY NEUTRALIZING ANTI-HEPARANASE MONOCLONAL ANTIBODY
☑	AT0318912E	2006-03-15	1998-08-31	POLYNUKLEOTID KODIEREND F R EIN POLYPEPTID MIT HEPARANASE-AKTIVIT T UND DESSEN EXPRESSION IN TRANSDUZIERTEN ZELLEN
133 family members shown above				

Other Abstract Info: CHEMABS 130(17)219167W CHEMABS 134(02)013334X CHEMABS 134(10)128217D CHEMABS 134(14)188168Y CHEMABS 136(13)195300E DERABS C1999-302255

claims 20-28
Section 2,4,5 against 41 133264/2
claims 9-12 of IL application
144932

What is claimed is:

1. A polynucleotide fragment comprising a polynucleotide sequence encoding a polypeptide having heparanase catalytic activity, wherein said polypeptide shares at least 70% homology with SEQ ID NO:10, as determined using default parameters of a DNA sequence analysis software package developed by the Genetic Computer Group (GCG) at the University of Wisconsin.

2. The polynucleotide fragment of claim 1, wherein said polynucleotide sequence includes nucleotides 63-1691 of SEQ ID NO:9.

3. The polynucleotide fragment of claim 1, wherein said polynucleotide sequence includes nucleotides 63-721 of SEQ ID NO:9.

4. The polynucleotide fragment of claim 1, wherein said polynucleotide is as set forth in SEQ ID NO:9.

5. The polynucleotide fragment of claim 1, wherein said polynucleotide sequence includes a segment of SEQ ID NO:9, said segment encodes said polypeptide having said heparanase catalytic activity.

6. The polynucleotide fragment of claim 1, wherein said polypeptide includes an amino acid sequence as set forth in SEQ ID NO:10.

7. The polynucleotide fragment of claim 1, wherein said polypeptide includes a segment of SEQ ID NO:10, said segment harbors said heparanase catalytic activity.

8. The polynucleotide fragment of claim 1, wherein said polynucleotide sequence is selected from the group consisting of double stranded DNA, single stranded DNA and RNA.

9. A polynucleotide sequence as set forth in SEQ D NO:9.

10. A polynucleotide sequence at least 70% homologous to SEQ ID NO:9, as determined using default parameters of a DNA sequence analysis software package developed by the Genetic Computer Group (GCG) at the University of Wisconsin, wherein said polynucleotide sequence encodes a polypeptide having heparanase catalytic activity.

11. A vector comprising a polynucleotide sequence encoding a polypeptide having heparanase catalytic activity, wherein said polypeptide shares at least 70% homology with SEQ ID NO:10, as determined using default parameters of a DNA sequence analysis software package developed by the Genetic Computer Group (GCG) at the University of Wisconsin.

12. The vector of claim 11, wherein said polynucleotide sequence includes nucleotides 63-1691 of SEQ ID NO:9.

13. The vector of claim 11, wherein said polynucleotide sequence includes nucleotides 63-721 of SEQ ID NO:9.

14. The vector of claim 11, wherein said polynucleotide sequence is as set forth in SEQ ID NO:9.

15. The vector of claim 11, wherein said polynucleotide sequence includes a segment of SEQ ID NO:9, said segment encodes said polypeptide having said heparanase catalytic activity.

16. The vector of claim 11, wherein said polypeptide includes an amino acid sequence as set forth in SEQ ID NO:10.

17. The vector of claim 11, wherein said polypeptide includes a segment of SEQ ID NO:10, said segment harbors said heparanase catalytic activity.

18. The vector of claim 11, wherein said polynucleotide sequence is selected from the group consisting of double stranded DNA, single stranded DNA and RNA.

19. The vector of claim 11, wherein said vector is a baculovirus vector.

20. A host cell comprising an exogenous polynucleotide fragment including a polynucleotide sequence encoding a polypeptide having heparanase catalytic activity, wherein said polypeptide shares at least 70% homology with SEQ ID NO:10 as determined using default parameters of a DNA sequence analysis software package developed by the Genetic Computer Group (GCG) at the University of Wisconsin.

21. The host cell of claim 20, wherein said polynucleotide sequence includes nucleotides 63-1691 of SEQ ID NO:9.

22. The host cell of claim 20, wherein said polynucleotide sequence includes nucleotides 63-721 of SEQ ID NO:9.

23. The host cell of claim 20, wherein said polynucleotide sequence is as set forth in SEQ ID NO:9.

24. The host cell of claim 20, wherein said polynucleotide sequence includes a segment of SEQ ID NO:9, said segment encodes said polypeptide having said heparanase catalytic activity.

25. The host cell of claim 20, wherein said polypeptide includes an amino acid sequence as set forth in SEQ ID NO:10.

26. The host cell of claim 20, wherein said polypeptide includes a segment of SEQ ID

NO:10, said segment harbors said heparanase catalytic activity.

27. The host cell of claim 20, wherein said polynucleotide sequence is selected from the group consisting of double stranded DNA, single stranded DNA and RNA.

28. A host cell expressing a recombinant heparanase, wherein said recombinant heparanase shares at least 70% homology with SEQ ID NO:10, as determined using default parameter of a DNA sequence analysis software package developed by the Genetic Computer (Group (GCG) at the University of Wisconsin.

29. A heparanase overexpression system comprising a cell overexpressing heparanase catalytic activity, wherein said heparanase catalytic activity is effected by a recombinant heparanase sharing at least 70% homology with SEQ ID NO:10, as determined using default parameters of a DNA sequence analysis software package developed by the Genetic Computer Group (GCG) at the University of Wisconsin.

30. The host cell of claim 20, wherein said cell is an insect cell.

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